

ABSTRACT OF THE DISCLOSURE

A method of manufacturing an axle tube housing for a differential assembly includes heating a localized area of a one-piece tubular blank. A mandrel is inserted within the tubular blank and the localized area is then deformed to provide an increased wall thickness. A compression force is applied to the localized area of the one-piece tubular blank using a forging die to form a spindle section, wherein the spindle section closely conforms to at least one of the forging die and the mandrel. The remaining portion of the one-piece tubular blank is then cold reduced to form a carrier section.